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ADHESION OF *CANDIDA ALBICANS* AND *CANDIDA DUBLINIENSIS* TO ACRYLIC AND HYDROXYAPATITE

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Candida albicans is a fungal pathogen that is considered one of the major responsible for candidosis among candida species. recently a new species, *Candida dubliniensis*, was recovered from the mouth of hiv-infected patients. the ability of these organisms to adhere to oral surfaces, as prostheses and teeth may contribute to oral infection. so, the main goal of this work was the determination of the capability of both species to adhere to oral materials (hydroxyapatite (hap) and acrylic), in the presence of water or saliva. in order to interpret the adhesion results, the surface properties of cells and materials were determined. surface tension components (polar and apolar) and hydrophobicity were calculated through contact angle measurement and the elemental composition was determined by xps. the results showed no significant differences in the number of adhered cells of both species to acrylic and hydroxyapatite. this was corroborated by the similarities in their surface properties and elemental composition. for both cells, the adhesion to acrylic increased in the presence of saliva due to the increase in the electron donor capacity of this material. in the absence of saliva the number of adhered cells to hap was greater than to acrylic, because this material has a higher number of electron donor groups. hydrophobicity played a minor role in the adhesion process of both candidal species. conversely, lewis acid base interactions seemed to govern this phenomenon. finally, as the extent of adhesion of the two candida species to teeth (hap) and prostheses (acrylic) is similar in the presence of saliva, both surfaces can be equally considered as important reservoirs for candidal infections.